III. CLAIM AMENDMENTS

1. (Previously presented) A method of determining a bit rate of information transmitted from a first communication device to a second communication device, the first communication device comprising a protocol stack, the protocol stack comprising a protocol layer, the protocol layer providing a logical channel for transferring the transmitted information through said protocol layer, the method comprising:

- transferring the transmitted information through the protocol layer via said logical channel according to a chosen transport format, the transport format defining a predetermined transmission block size for transfer of said transmitted information via the logical channel, an amount of transmitted information equal to the transmission block size being transferred in a predetermined transmission time interval;
- determining, at the first communication device, a bit rate value representative of the bit rate in the logical channel on the basis of the chosen transport format; and
- providing an indication of the determined bit rate value to one of an application program running on the first communication device and another protocol layer of the first communication device.

2.-5. (Canceled)

6. (Previously presented) A method according to claim 1, wherein said protocol stack is a WCDMA (Wideband Code Division Multiple Access) protocol stack and that the first communication device communicates with said second communication device using the WCDMA protocol stack.

7. (Previously presented) A method according to claim 1, wherein the protocol layer through which the transmitted information is transferred via said logical channel is the MAC (Medium Access Control) Layer of the WCDMA protocol stack.

8. (Previously presented) A method according to claim 1, wherein said first communication device is a wireless terminal of a cellular communication network and the second communication device is a network element of a cellular communication network.

9. (Previously presented) A method according to claim 1, wherein said first communication device is a network element of a cellular communication network and said second communication device is a wireless terminal of a cellular communication network.

10. (Previously presented) A method according to claim 1, wherein said transport format comprises parameters TBS (Transmission Block Size) and TTI (Transmission Time Interval), and the bit rate value representative of the bit rate in said logical channel is determined on the basis of the values of said parameters by means of a mathematical calculation in which the value of parameter TBS is divided by the value of parameter TTI, thereby providing an estimate of the instantaneous bit-rate in the logical channel during a period of time defined by TTI.

11. (Currently amended) A method according to claim 1, wherein ~~more than one logical channel passes through said protocol layer and the method of claim 1 is applied to each of said more than one logical channels~~ said protocol layer has a plurality of logical channels including said logical channel, said method further comprising determining, at the first communication device, a plurality of bit rate values including said bit rate value, each of said plurality of bit rate values being representative of a bit rate in a corresponding one of said plurality of logical channels, each of said plurality of bit rate values being determined on the basis of a transport format chosen for the corresponding logical channel.

12.-13. (Canceled)

14. (Previously presented) A method according to claim 6, comprising obtaining information about the chosen transport format from the MAC Layer of the WCDMA protocol stack in response to the transfer of a data block coming from the RLC Layer of the WCDMA protocol stack from a logical channel of the MAC Layer to a transport channel of the Physical Layer of the WCDMA protocol stack in connection with transmission of the data block.

15.-16. (Cancelled)

17. (Previously presented) A method according to claim 1, comprising determining the bit rate value in the logical channel repeatedly.

18. (Previously presented) A method according to claim 17, comprising maintaining and updating said repeatedly determined bit rate value in a memory available for use by the first communication device.

19. (Previously presented) A method according to claim 17, comprising calculating an average bit rate in said logical channel.

20. (Previously presented) A method according to claim 19, comprising calculating said average as a running average.

21. (Previously presented) A method according to claim 19, comprising maintaining and updating said average in a memory available for use by the first communication device.

22. (Canceled)

23. (Previously presented) A method according to claim 1, wherein said application program running on the first communication device optimizes an information flow produced by the application program in response to said indication of the determined bit rate value.

24. (Canceled)

25. (Previously presented) A method according to claim 1, wherein said other protocol layer optimizes an information flow transmitted by said other protocol layer in response to said indication of the determined bit rate value.

26. (Currently amended) A method according to claim 11, ~~wherein more than one logical channel passes through said protocol layer and a PDP (Packet Data Protocol) context uses more than one logical channel for transmitting said transmitted information to said second communication device, the method comprising determining a total bit rate of the PDP context in a given communication direction~~ further comprising determining a total bit rate of a PDP (Packet Data Protocol) context employing more than one of said logical channels by adding the bit rate values of respective ones of the logical channels in use by the PDP context ~~in said given communication direction~~.

27. (Previously presented) A method of determining a bit rate of information received at a first communication device from a second communication device, the first communication device comprising a protocol stack, the protocol stack comprising a protocol layer, the protocol layer providing a logical channel for transferring the received information through said protocol layer, the method comprising:

- transferring the received information through the protocol layer via said logical channel according to a chosen transport format, the transport format defining a predetermined transmission block size for transfer of said received ~~transmitted~~ information via the logical channel, an amount of received ~~transmitted~~ information

equal to the transmission block size being transferred in a predetermined transmission time interval;

- determining, at the first communication device, a bit rate value representative of the bit rate in the logical channel on the basis of the chosen transport format; and
- providing an indication of the determined bit rate value to one of an application program running on the first communication device and another protocol layer of the first communication device.

28. (Previously presented) A method according to claim 27, wherein said first communication device comprises a WCDMA protocol stack, the method comprising obtaining information about the chosen transport format from the MAC Layer of the WCDMA protocol stack.

29. (Previously presented) A communication device comprising a protocol stack, the protocol stack comprising a protocol layer , the protocol layer being arranged to provide a logical channel for transferring transmitted information through said protocol layer, the communication device being arranged to:

- transfer the transmitted information through the protocol layer via said logical channel according to a chosen transport format, the transport format defining a predetermined transmission block size for transfer of said transmitted information via the logical channel, an amount of transmitted information equal to the transmission block size being transferred in a predetermined transmission time interval;
- determine a bit rate value representative of the bit rate in the logical channel on the basis of the chosen transport format; and
- provide an indication of the determined bit rate value to one of an application program running on the communication device and another protocol layer of the communication device.

30. (Canceled)

31. (Previously presented) A communication device according to claim 29, arranged to determine the bit rate value in the logical channel repeatedly.

32. (Previously presented) A communication device according to claim 31, comprising a database for maintaining and updating said repeatedly determined bit rate value.

33. (Previously presented) A communication device according to claim 29, arranged to calculate an average of the bit rate in the logical channel.

34. (Previously presented) A communication device according to claim 33, arranged to calculate said average as a running average.

35. (Previously presented) A communication device according to claim 33, comprising a database for maintaining and updating said average.

36. (Previously presented) A communication device comprising a protocol stack, the protocol stack comprising a protocol layer, the protocol layer being arranged to provide a logical channel for transferring received information through said protocol layer, the communication device being arranged to:

- transfer the received information through the protocol layer via said logical channel according to a chosen transport format, the transport format defining a predetermined transmission block size for transfer of said received~~transmitted~~ information via the logical channel, an amount of received ~~transmitted~~ information equal to the transmission block size being transferred in a predetermined transmission time interval;
- determine a bit rate value representative of the bit rate in the logical channel on the basis of the chosen transport format; and

- provide an indication of the determined bit rate value to one of an application program running on the communication device and another protocol layer of the communication device.

37. (New) A method according to claim 27, wherein said protocol stack is a WCDMA (Wideband Code Division Multiple Access) protocol stack and that the first communication device communicates with said second communication device using the WCDMA protocol stack.

38. (New) A method according to claim 27, wherein the protocol layer through which the received information is transferred via said logical channel is the MAC (Medium Access Control) Layer of the WCDMA protocol stack.

39. (New) A method according to claim 27, wherein said first communication device is a wireless terminal of a cellular communication network and the second communication device is a network element of a cellular communication network.

40. (New) A method according to claim 27, wherein said first communication device is a network element of a cellular communication network and said second communication device is a wireless terminal of a cellular communication network.

41. (New) A method according to claim 27, wherein said transport format comprises parameters TBS (Transmission Block Size) and TTI (Transmission Time Interval), and the bit rate value representative of the bit rate in said logical channel is determined on the basis of the values of said parameters by means of a mathematical calculation in which the value of parameter TBS is divided by the value of parameter TTI, thereby providing an estimate of the instantaneous bit-rate in the logical channel during a period of time defined by TTI.

42. (New) A method according to claim 27, wherein said protocol layer has a plurality of logical channels including said logical channel, said method further comprising determining, at the first communication device, a plurality of bit rate values including said bit rate value, each of said plurality of bit rate values being representative of a bit rate in a corresponding one of said plurality of logical channels, each of said plurality of bit rate values being determined on the basis of a transport format chosen for the corresponding logical channel.

43. (New) A method according to claim 1, wherein said protocol layer has a plurality of logical channels including said logical channel, said method further comprising determining, at the first communication device, a plurality of bit rate values including said bit rate value, each of said plurality of bit rate values being representative of a bit rate in a corresponding one of said plurality of logical channels, each of said plurality of bit rate values being determined on the basis of a transport format chosen for the corresponding logical channel.

44. (New) A method according to claim 43, comprising maintaining and updating said repeatedly determined bit rate value in a memory available for use by the first communication device.

45. (New) A method according to claim 43, comprising calculating an average bit rate in said logical channel.

46. (New) A method according to claim 45, comprising calculating said average as a running average.

47. (New) A method according to claim 45, comprising maintaining and updating said average in a memory available for use by the first communication device.

48. (New) A method according to claim 42, further comprising determining a total bit rate of a PDP (Packet Data Protocol) context employing more than one of said logical channels by adding the bit rate values of respective ones of the logical channels in use by the PDP context.

49. (New) A method of determining a bit rate of information transferred through a protocol layer of a protocol stack via a logical channel according to a chosen transport format, the transport format defining a transmission block size and a transmission time interval for transfer of said information via the logical channel, the method comprising:

- determining a bit rate value representative of the bit rate in the logical channel on the basis of the chosen transport format; and
- providing an indication of the bit rate value determined for the logical channel for use by one of an application program and another protocol layer.

50. (New) A method according to claim 49, comprising determining the bit rate value representative of the bit rate in said logical channel by dividing the transmission block size by the transmission time interval.

51. (New) A method according to claim 49, comprising receiving an indication of the chosen transport format for the logical channel.

52. (New) A method according to claim 49, comprising determining bit rate values for more than one logical channel on the basis of respective transport formats chosen for said more than one logical channel.

53. (New) A method according to claim 52, comprising determining a total bit rate of a PDP (Packet Data Protocol) context by adding the bit rate values determined for the logical channels in use by the PDP context.

54. (New) A method according to claim 52, comprising determining a total bit rate for the protocol layer by adding together the bit rate values determined for all logical channels of the protocol layer.

55. (New) A method according to claim 49, comprising repeatedly determining the bit rate value representative of the bit rate in the logical channel.

56. (New) A method according to claim 49, comprising maintaining and updating the bit rate value in a database.

57. (New) A method according to claim 56, comprising not updating the bit rate value in the database if no information is transferred through the protocol layer via the logical channel in a particular transmission time interval.

58. (New) A method according to claim 56, comprising updating the bit rate value in the database with a value of zero if no information is transferred through the protocol layer via the logical channel in a particular transmission time interval.

59. (New) A method according to claim 56, comprising determining that a bit rate value maintained in the database is out of date if a last update of the bit rate value was performed substantially longer ago than one transmission time interval.

60. (New) A method according to claim 49, comprising calculating an average bit rate value representative of an average bit rate in said logical channel.

61. (New) A method according to claim 60, comprising calculating said average as a running average of repeatedly determined bit rate values.

62. (New) A method according to claim 60, comprising maintaining and updating said average bit rate value in a database.

63. (New) A method according to claim 56, comprising providing an indication of at least one of a determined bit rate value and an average bit rate value from the database responsive to a request received from an application program or a user protocol.

64. (New) A method according to claim 56, comprising automatically providing an indication of at least one of a determined bit rate value and an average bit rate value from the data base to an application program or a user protocol.

65. (New) A method according to claim 49, comprising optimizing an information flow of an application program responsive to said indication of the determined bit rate value.

66. (New) A method according to claim 49, comprising optimizing an information flow of another protocol layer responsive to said indication of the determined bit rate value.

67. (New) A method according to claim 66, comprising adjusting a TCP (Transmission Control Protocol) sliding window transmission mechanism responsive to said indication of the determined bit rate value.

68. (New) A method according to claim 66, comprising making a decision to start or stop end-to-end IP (Internet Protocol) payload compression responsive to said indication of the determined bit rate value.

69. (New) A method according to claim 49, comprising estimating a bit rate at another protocol layer of the protocol stack.

70. (New) Apparatus for determining a bit rate of information transferred through a protocol layer of a protocol stack via a logical channel according to a chosen transport format, the transport format defining a transmission block size and a transmission time interval for transfer of said information via the logical channel, the apparatus comprising a bit rate estimation block for determining a bit rate value representative of the bit rate in the logical channel on the basis of the chosen transport format and for providing an indication of the bit rate value determined for the logical channel for use by one of an application program and another protocol layer.

71. (New) Apparatus according to claim 70, wherein the bit rate estimation block is operable to determine the bit rate value representative of the bit rate in said logical channel by dividing the transmission block size by the transmission time interval.

72. (New) Apparatus according to claim 70, wherein the apparatus is operable to receive an indication of the chosen transport format for the logical channel.

73. (New) Apparatus according to claim 70, comprising a database block coupled to receive said indication of the bit rate value determined for the logical channel, wherein the database block is operable to maintain and update said bit rate value.

74. (New) Apparatus according to claim 70, wherein the bit rate estimation block is operable to determine a bit rate value for more than one logical channel on the basis of respective transport formats chosen for said more than one logical channel.

75. (New) Apparatus according to claim 74, comprising a database block coupled to receive indications of the bit rate values determined for said more than one logical channel and logical channel identifiers associated with the logical channels, wherein the database block is operable to maintain and update bit rate values associated with said more than one logical channel.

76. (New) Apparatus according to claim 75, wherein the database block is operable to determine a total bit rate of a PDP (Packet Data Protocol) context by adding the bit rate values determined for the logical channels in use by the PDP context.

77. (New) Apparatus according to claim 75, wherein the database block is operable to determine a total bit rate for the protocol layer by adding together the bit rate values determined for all logical channels of the protocol layer.

78. (New) Apparatus according to claim 73, wherein the database block is operable not to update the bit rate value for the logical channel if no information is transferred through the protocol layer via the logical channel in a particular transmission time interval.

79. (New) Apparatus according to claim 73, wherein the database block is operable to update the bit rate value for the logical channel with a value of zero if no information is transferred through the protocol layer via the logical channel in a particular transmission time interval.

80. (New) Apparatus according to claim 73, wherein the database block is operable to determine that a bit rate value maintained in the database is out of date if a last update of the bit rate value was performed substantially longer ago than one transmission time interval.

81. (New) Apparatus according to claim 73, wherein the database block is operable to maintain an average bit rate value representative of an average bit rate in said logical channel.

82. (New) Apparatus according to claim 81, wherein the database block is operable to calculate said average as a running average of repeatedly determined bit rate values.

83. (New) Apparatus according to claim 73, wherein the database block is operable to provide an indication of at least one of a determined bit rate value and an average bit rate value responsive to a request received from an application program or a user protocol.

84. (New) Apparatus according to claim 73, wherein the database block is operable to provide an indication of at least one of a determined bit rate and average bit rate value from the data base automatically to an application program or a user protocol.

85. (New) A communication device comprising apparatus for determining a bit rate of information transferred through a protocol layer of a protocol stack via a logical channel according to a chosen transport format, the transport format defining a transmission block size and a transmission time interval for transfer of said information via the logical channel, the apparatus comprising a bit rate estimation block for determining a bit rate value representative of the bit rate in the logical channel on the basis of the chosen transport format and for providing an indication of the bit rate value determined for the logical channel for use by one of an application program and another protocol layer.

86. (New) A communication device according to claim 85, wherein the communication device is a mobile station of a WCDMA (Wideband Code Division Multiple Access) wireless communication network, the protocol stack is a WCDMA protocol stack and the protocol layer is a MAC (Medium Access Control) layer of the WCDMA protocol stack.

87. (New) A communication device according to claim 85, wherein the communication device is a network element of a WCDMA (Wideband Code Division Multiple Access) wireless communication network, the protocol stack is a WCDMA protocol stack and the protocol layer is a MAC (Medium Access Control) layer of the WCDMA protocol stack.

88. (New) A computer program embodied on a carrier medium for determining a bit rate of information transferred through a protocol layer of a protocol stack via a logical channel according to a chosen transport format, the transport format defining a transmission block size and a transmission time interval for transfer of said information via the logical channel, the software program comprising machine readable code for determining a bit rate value representative of the bit rate in the logical channel on the basis of the chosen transport format and machine readable code for providing an indication of the bit rate value determined for the logical channel for use by one of an application program and another protocol layer.

89. (New) A computer program according to claim 88, comprising machine readable code for determining the bit rate value representative of the bit rate in said logical channel by dividing the transmission block size by the transmission time interval.